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nature 1 January 1987 Volume 325

URRENT PERIODICALS From emission in the hydroid Obelia is luminescent support cells, which are coupled to the photocytes by gap junctions. This countills of intercellular chemical signaling through gap junctions is reported on page 60.

loage washington univa Adam could have been contemporaries after all.

THIS WEEK 13 News special .. pages 5-9

ome of Nature's corresponelents give a personal perspective on 1987. What will be the important happenings of the coming year?

Sakharov

. page 3



Exile lifted. Sakharov as outipoken as ever.

Will grebes provide The answer?

. . page 16

Cohabiting species seem to emphasize their differences from each other.



Did Adam and Eve meet?

.. pages 13 and 31

All humans are descended from one female who lived in Africa about 200,000 years ago, claim Rebecca L. Cann, Mark Stoneking and Allan C. Wilson. But Jim Wainscoat

■ Optical logic achieved

. . . pages 12 and 27

Optical switches have been linked together by laser beams for the first time to produce a functioning logic circuit of the type that will lead to a new generation of computers. In a News and Views article Alan Miller puts this work by Professor S.D. Smith and his colleagues into context: optical computers will not compete with electronic machines but rather will be complementary to them, allowing particular flexibility in the use of simultaneous identical calculations involving large data sets that is, parallel processing.

■ Noisy crystals . . . page 40

With the help of an acoustic emission analyser, the noise of a polymer crystallizing has been recorded. The sound represents the release of the stress that is built up as the crystals begin to form.

■ Birdsong in helium

. . . page 53

A sparrow singing in an atmosphere of helium has shown that resonances in a songbird's vocal tract help put the sweetness into its song. This conclusion, which is contrary to previous assumptions. makes the production of birdsong more like that of human wonders whether Eve and sound than has been thought.

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